

AMENDMENTS TO THE CLAIMS**Claim 1. (Currently Amended)**

A moving image encoding apparatus comprising:

an encoding preprocessing portion for extracting an amount of image feature from a moving image not encoded and sorting each of frames constructing the moving image in order of the encoding, wherein the amount of image feature is extracted on an interframe basis;

a control portion upon receiving the image feature extracted from the preprocessing portion, setting interframe encoding parameters based on the amount of image feature extracted in the encoding preprocessing portion; and

an encoding portion for encoding the moving image whose frames are sorted by the encoding preprocessing portion, based on the encoding parameters from the control portion,

wherein the interframe encoding parameters are set to decrease a distance between an I-picture and a neighboring P-picture of a Group of Pictures (GOP).

Claim 2. (Original)

The moving image encoding apparatus as claimed in claim 1, wherein the encoding preprocessing portion extracts the amount of image feature for detecting a dissolve interval from the moving image not encoded, and the control portion changes settings of the encoding parameters within the dissolve interval and without the dissolve interval based on the amount of image feature extracted in the encoding preprocessing portion.

Claim 3. (Previously Presented)

The moving image encoding apparatus as claimed in claim 2, wherein the control portion sets the encoding parameters so that a distance between an intra coded picture and a neighboring predictive coded picture is 2, and a distance between nearest neighboring two predictive coded pictures is also 2 when the encoding portion encodes the frames of the dissolve interval based on the amount of image feature extracted in the encoding preprocessing portion.

Claim 4. (Original)

The moving image encoding apparatus as claimed in claim 1, wherein the control portion obtains a linear differential value and a quadratic differential value of the amount of image feature acquired from the encoding preprocessing portion and determines whether there is the dissolve interval or not according to the linear differential value and the quadratic differential value.

Claim 5. (Original)

The moving image encoding apparatus as claimed in claim 1, wherein the encoding preprocessing portion extracts the amount of image feature for each signal component of each of the frames constructing the moving image.

Claim 6. (Original)

The moving image encoding apparatus as claimed in claim 1, wherein the encoding preprocessing portion divides each of the frames constructing the moving image into a plurality of regions and obtains the amount of image feature for each of the plurality of regions.

Claim 7. (Currently Amended)

A moving image encoding method comprising the steps of:
extracting an amount of image feature from a moving image prior to encoding, wherein the amount of image feature is extracted on an interframe basis;
sorting each of frames constructing the moving image in order of encoding;
obtaining the extracted image feature, by a controller, the controller setting interframe encoding parameters based on the extracted image feature; and
encoding the moving image whose frames are sorted based on an interframe encoding parameter set according to the amount of image feature, wherein the interframe encoding parameter is set to decrease a distance between an I-picture and a neighboring P-picture of a GOP.

Claim 8. (Original)

The moving image encoding method as defined in claim 7, further comprising:
extracting the amount of image feature for detecting a dissolve interval from a moving image not encoded, as the amount of image feature; and

changing settings of the encoding parameters within the dissolve interval and without the dissolve interval on the basis of the amount of image feature.

Claim 9. (Currently Amended)

A moving image encoding apparatus, comprising:
an encoding preprocessing module which extracts interframe feature information from an unencoded moving image and sorts frames of the moving image in order of encoding;
a control module operatively connected to the encoding preprocessing module, wherein the control module sets interframe encoding parameters based upon the extracted interframe feature information received from the encoding preprocessing module; and
an encoding module operatively connected to the encoding preprocessing module and the control module, wherein the encoding module encodes the moving image based upon the encoding parameters, wherein the interframe encoding parameters are set to decrease a distance between an I-picture and a nearest neighboring P-picture of a GOP.

Claim 10. (Cancelled)

Claim 11. (Currently Amended)

A moving image encoding apparatus comprising:
an encoding preprocessing portion for extracting an amount of image feature from a moving image not encoded and sorting each of frames constructing the moving image in order of the encoding, wherein the amount of image feature is extracted on an interframe basis;

a control portion upon receiving the image feature extracted from the preprocessing portion, setting interframe encoding parameters based on the amount of image feature extracted in the encoding preprocessing portion; and

an encoding portion for encoding the moving image whose frames are sorted by the encoding preprocessing portion, based on the encoding parameters from the control portion,

~~The moving image encoding apparatus as claimed in claim 1, wherein the interframe encoding parameters are set to decrease a distance between a nearest neighboring two P pictures.~~

Claim 12. (Cancelled)

Claim 13. (Currently Amended)

A moving image encoding method comprising the steps of:

extracting an amount of image feature from a moving image prior to encoding, wherein the amount of image feature is extracted on an interframe basis;

sorting each of frames constructing the moving image in order of encoding;

obtaining the extracted image feature, by a controller, the controller setting interframe encoding parameters based on the extracted image feature; and

encoding the moving image whose frames are sorted based on an interframe encoding parameter set according to the amount of image feature,

~~The moving image encoding method as claimed in claim 7, wherein the interframe encoding parameter is set to decrease a distance between a nearest neighboring two P pictures.~~

Claim 14. (Cancelled)

Claim 15. (Currently Amended)

A moving image encoding apparatus, comprising:

an encoding preprocessing module which extracts interframe feature information from an unencoded moving image and sorts frames of the moving image in order of encoding;
a control module operatively connected to the encoding preprocessing module, wherein the control module sets interframe encoding parameters based upon the extracted interframe feature information received from the encoding preprocessing module; and
an encoding module operatively connected to the encoding preprocessing module and the control module, wherein the encoding module encodes the moving image based upon the encoding parameters.

The moving image encoding apparatus as claimed in claim 9, wherein the interframe encoding parameters are set to decrease a distance between a nearest neighboring two P pictures.